



IN VITRO GROWTH OF CD4+ PERIPHERAL BLOOD T CELLS IN SERUM-FREE MEDIUM

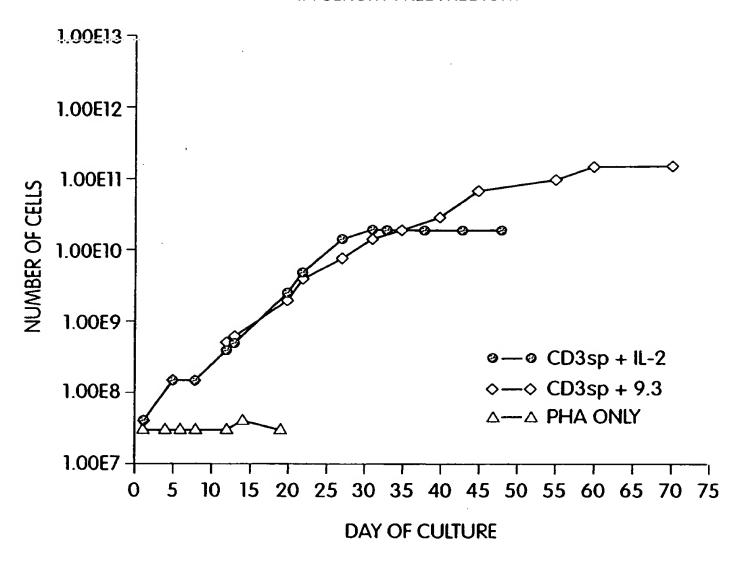


FIG. 1



GROWTH OF CD4+ PERIPHERAL BLOOD T CELLS IN RPMI PLUS 10% FETAL CALF SERUM

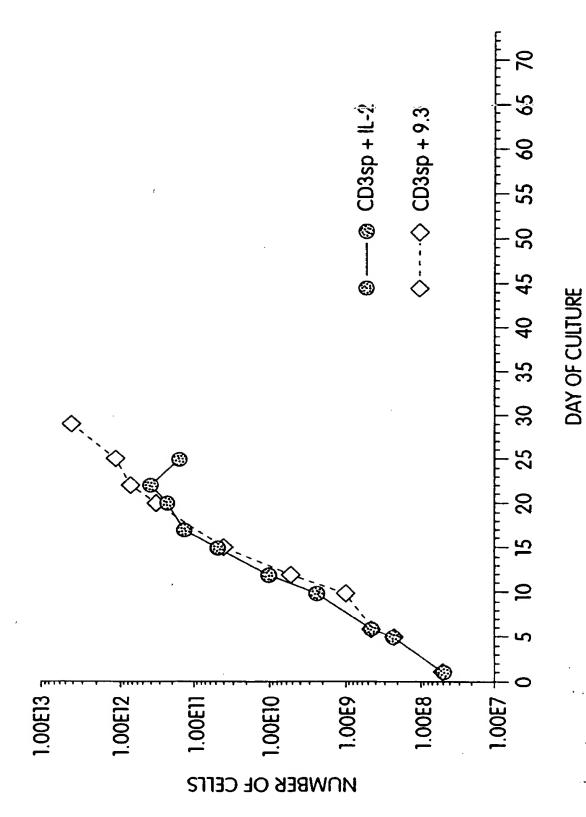
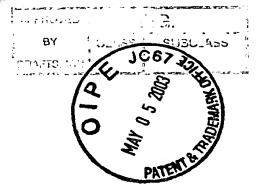


FIG. 2



GROWTH OF CD4+ PERIPHERAL BLOOD T CELLS

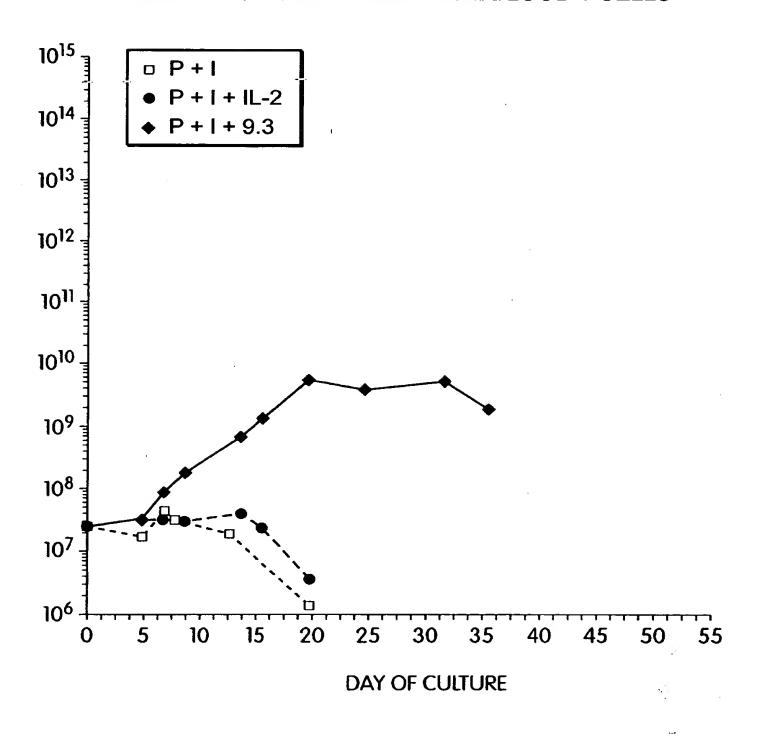


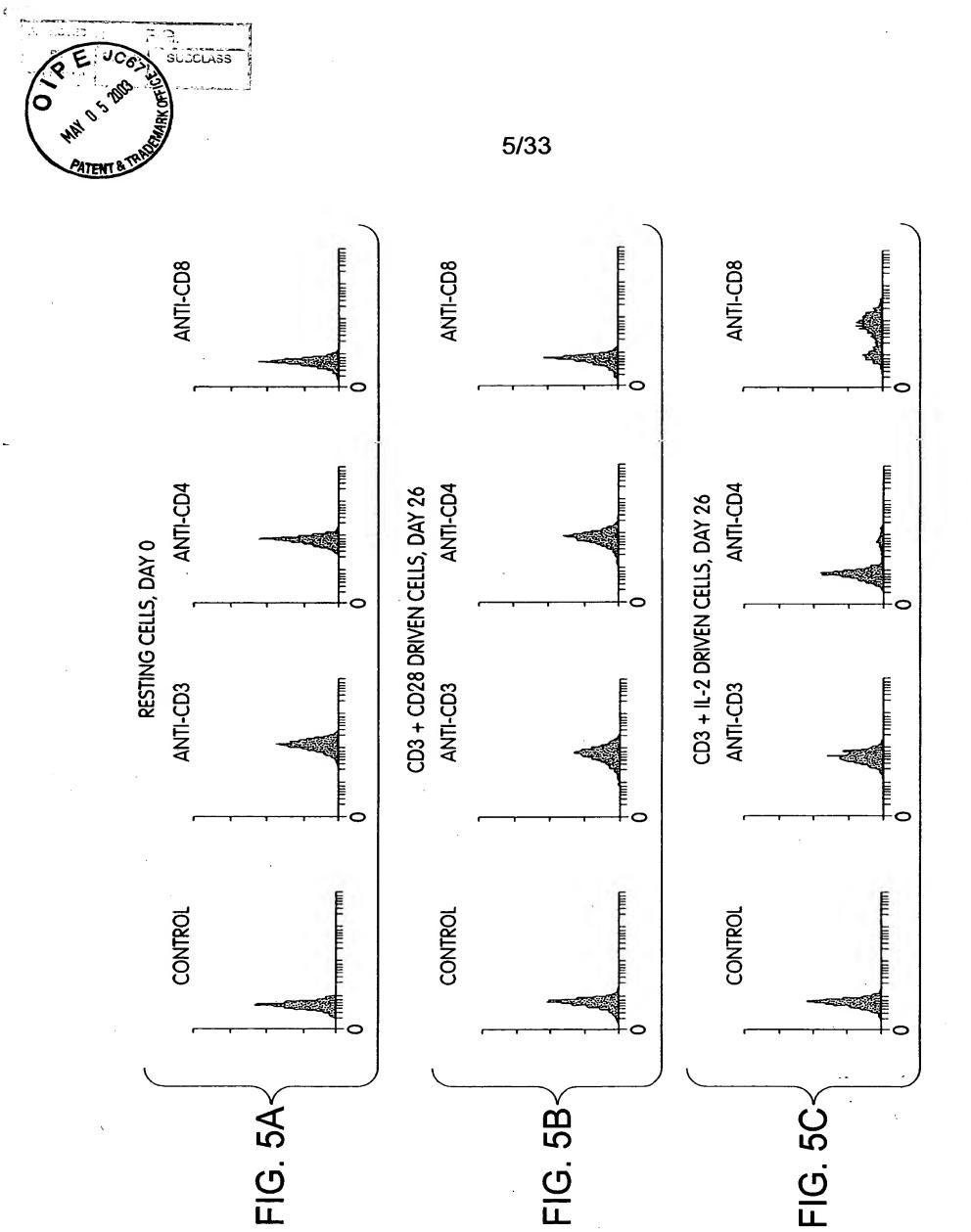
FIG. 3

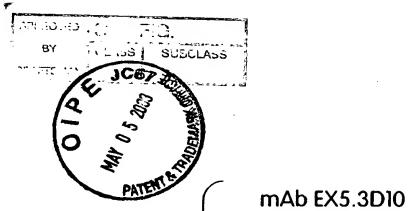


SELECTIVE OUTGROWTH OF CD4+ T CELLS DURING CD28 STIMULATED T CELL EXPANSION

		DAY 16	CD8		84.5	52.5	
\r \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	PHENOIYPE D. 16	νO	CD4		8.0	44.6	
	α -CD3 + α -CD28	DAY 0	CD8	13.9			
α-CD3 + IL-2			CD4	30.9			
\	- PBMIN	CULTURE			CD3 + IL-2	CD3 + CD28	

FIG. 4





CHO-DG44 CELLS

NEGATIVE CONTROL

10⁰ 10¹ 10² 10³ 10⁴

9.3

10⁰ 10¹ 10² 10³ 10⁴

EX5.3D10

FIG. 6A

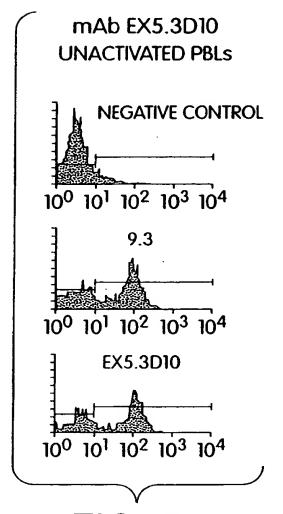


FIG. 6C

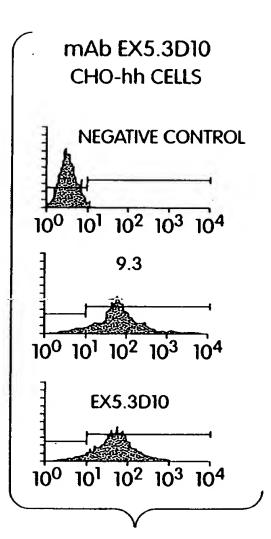


FIG. 6B

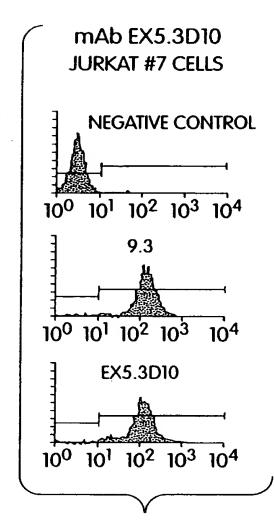
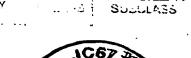


FIG. 6D





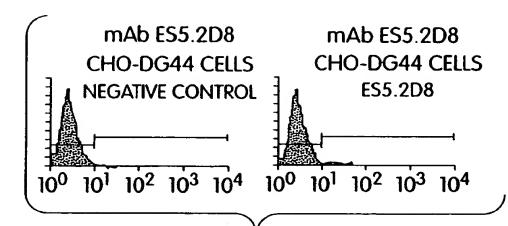


FIG. 7A

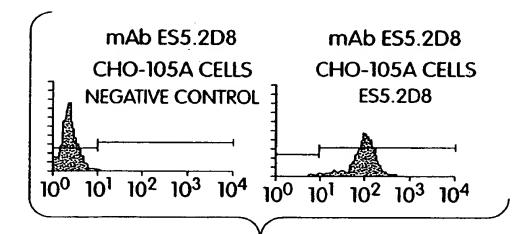


FIG. 7B

hPBLs:

UNACTIVATED
NEGATIVE CONTROL
100 101 102 103 104

FIG. 7C

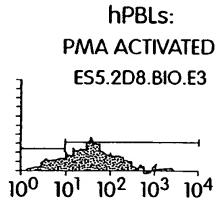


FIG. 7D



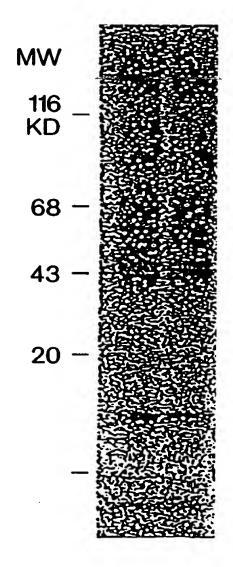
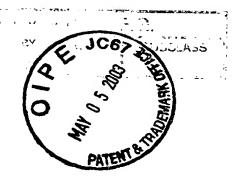
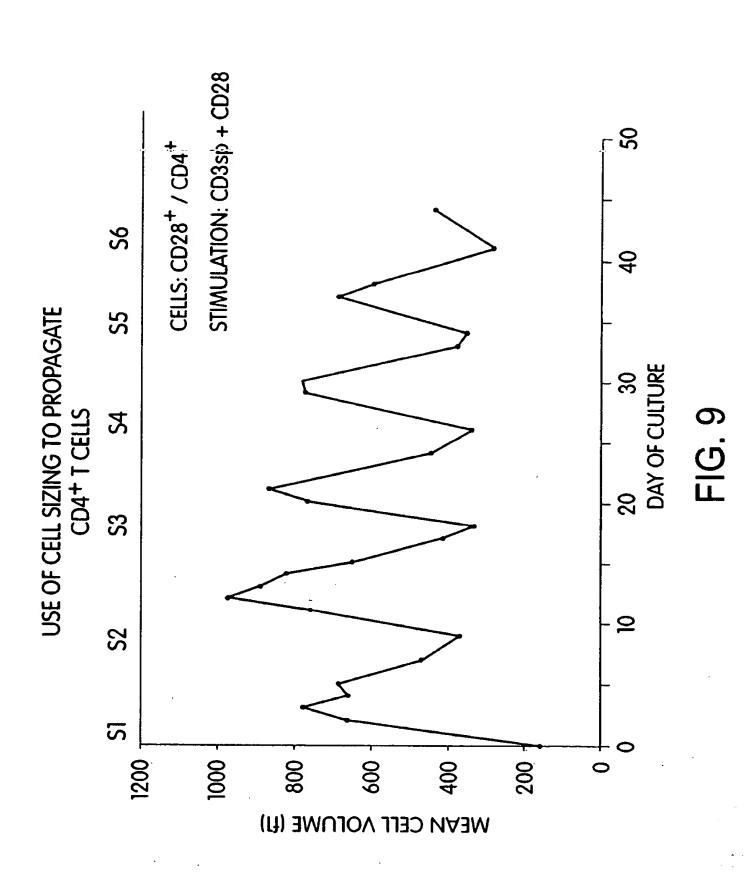
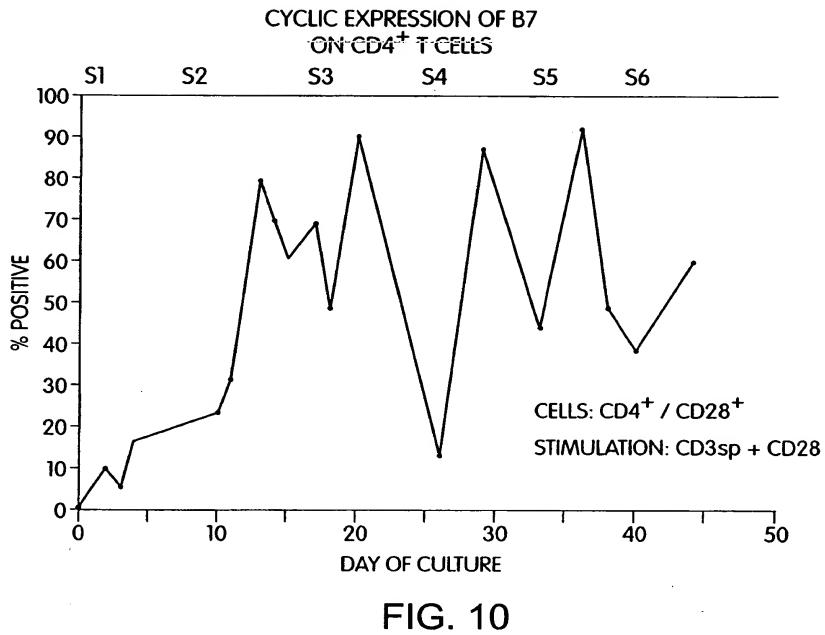


FIG. 8











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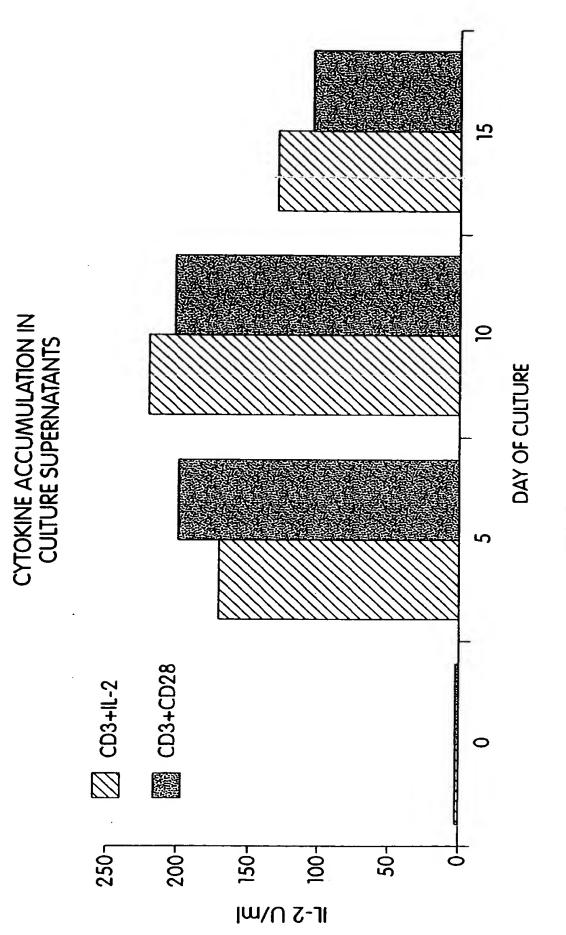
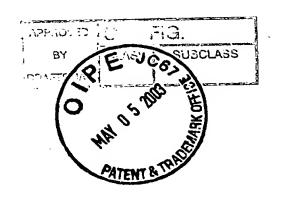
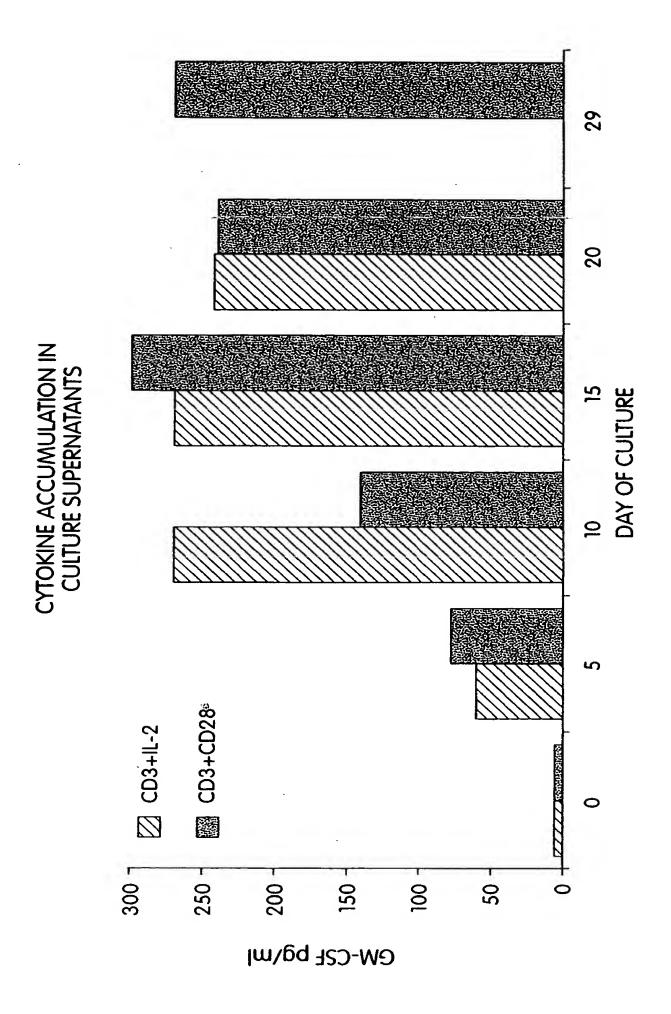
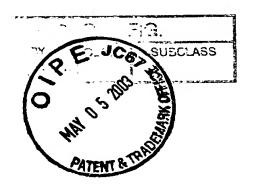
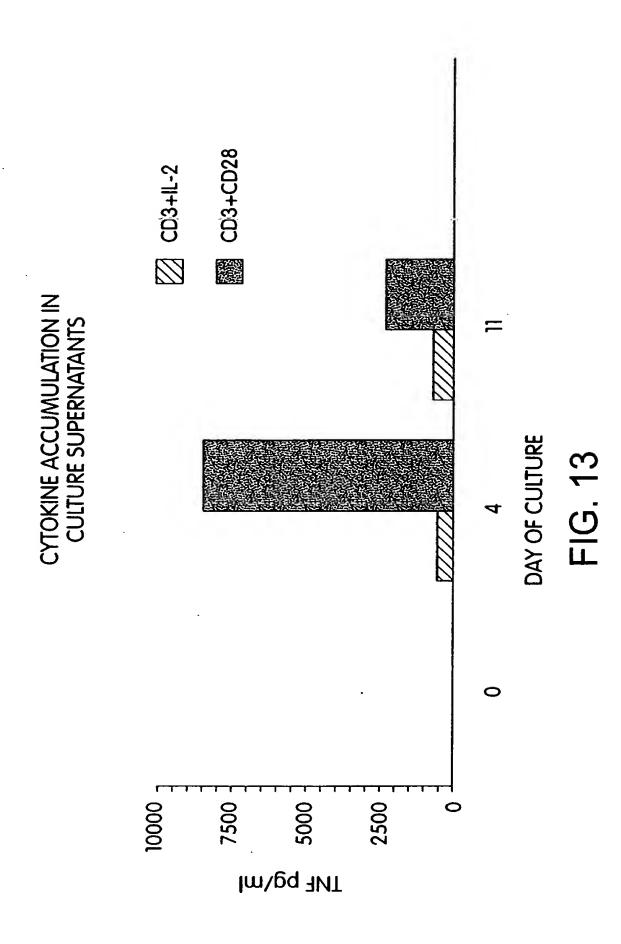


FIG. 11











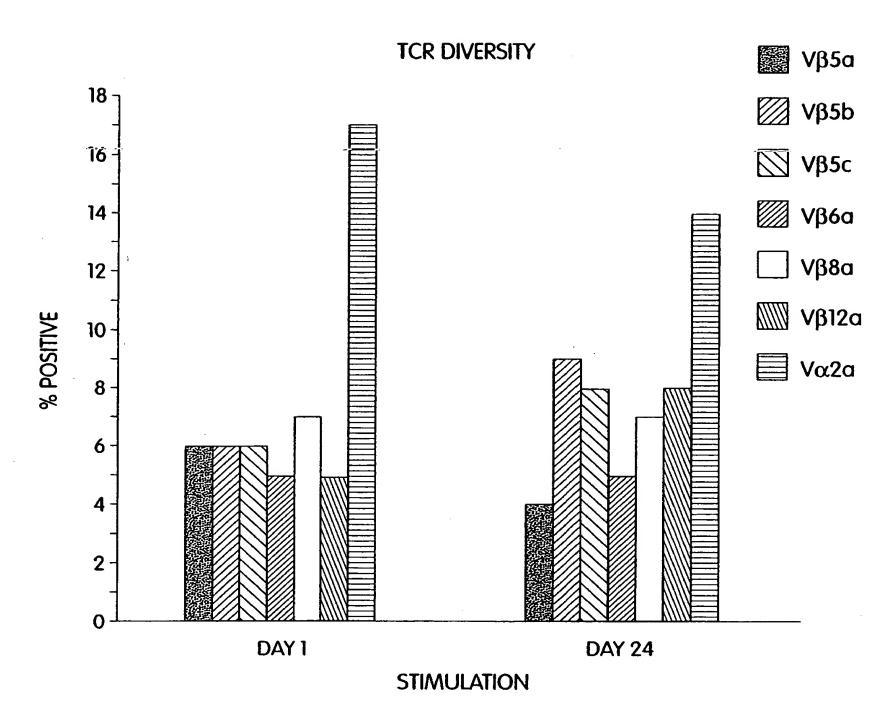
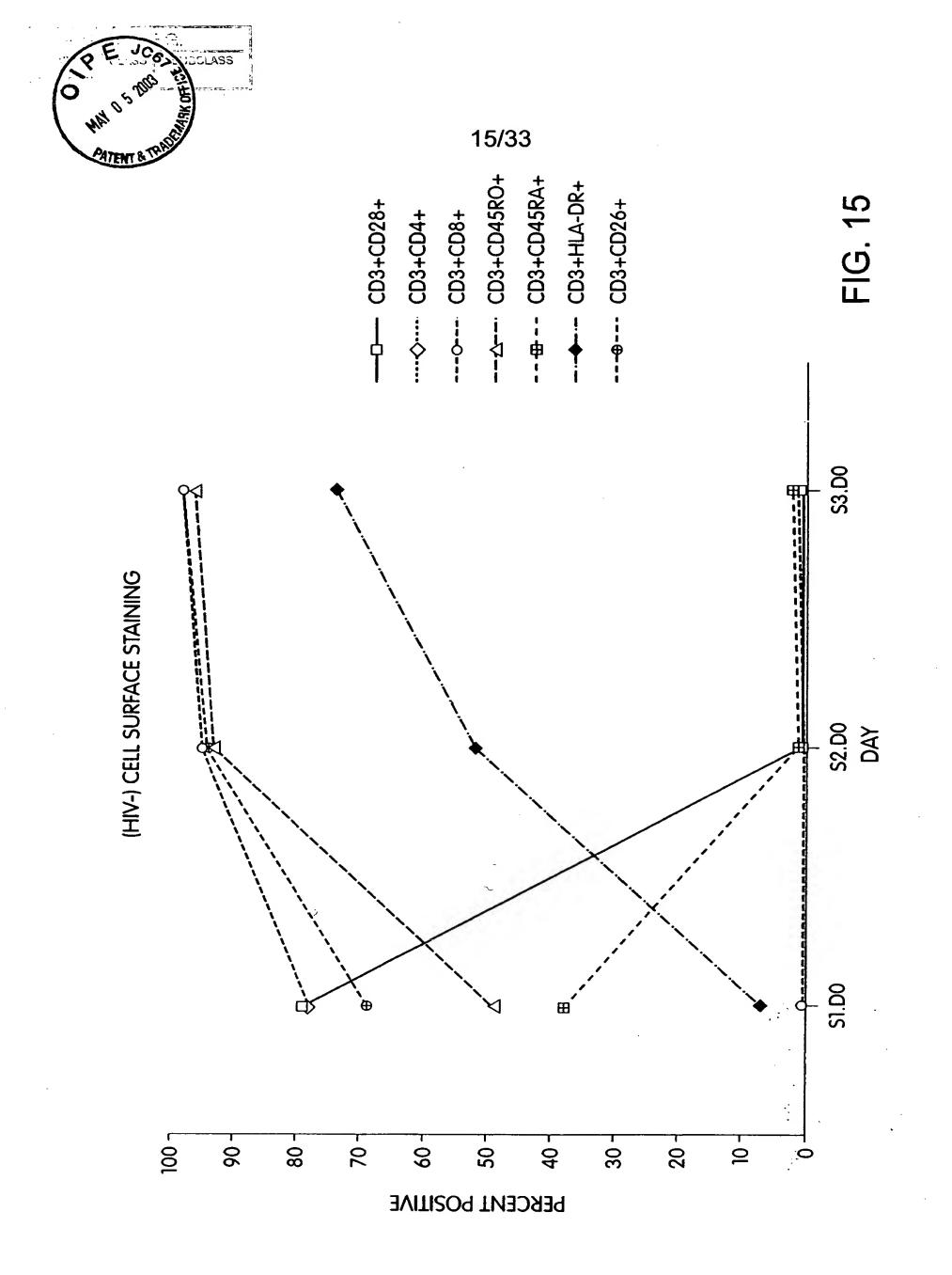
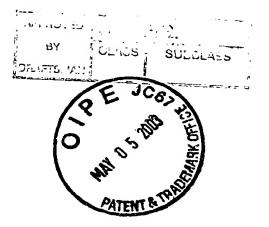
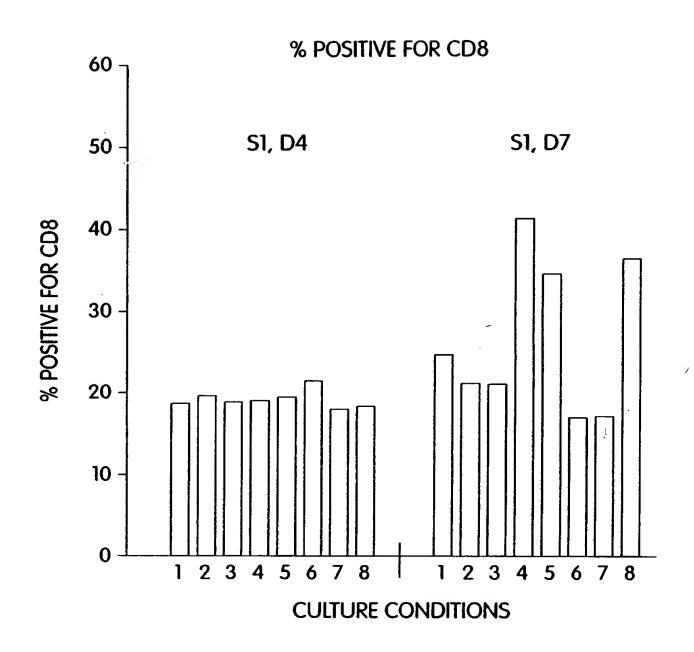


FIG. 14







```
#1: G19-4sp + IL-2
#2: G19-4sp + 9.3
#3: G19-4sp + EX5.3D10
#4: G19-4sp + ES5.2D8
#5: G19-4sp +7G11
#6: G19-4sp + 9.3 + ES5.2D8
#7: G19-4sp + 9.3 + 7G11
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#8: G19-4sp +ES5.2D8 + 7G11

FIG. 17

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CELLS STAINED WITH: IgG

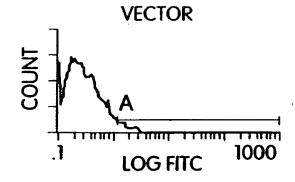


FIG. 18A

CD9

CELLS STAINED WITH: IgG

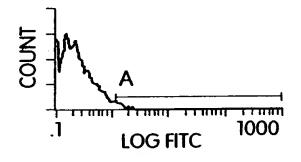


FIG. 18B

VECTOR

CELLS STAINED
WITH: mAb ES5.2D8

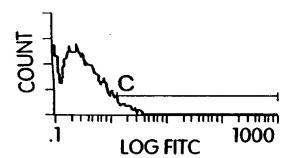


FIG. 18C

CELLS STAINED WITH: mAb ES5.2D8

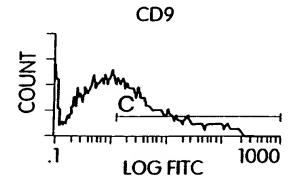
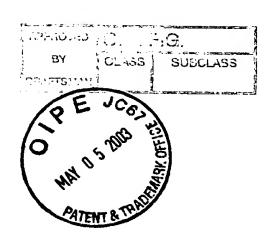


FIG. 18D



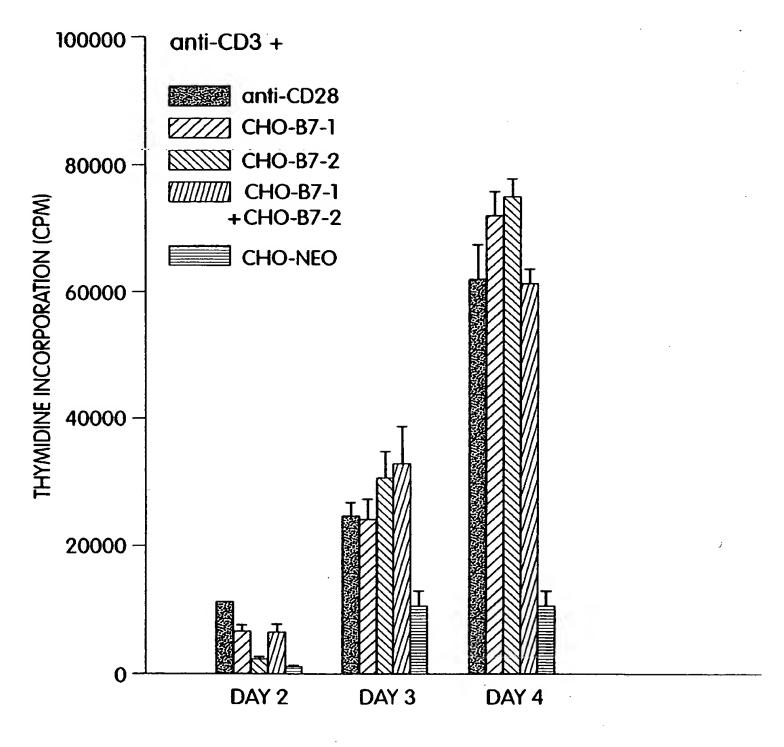
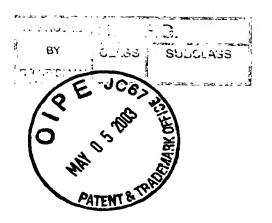


FIG. 19



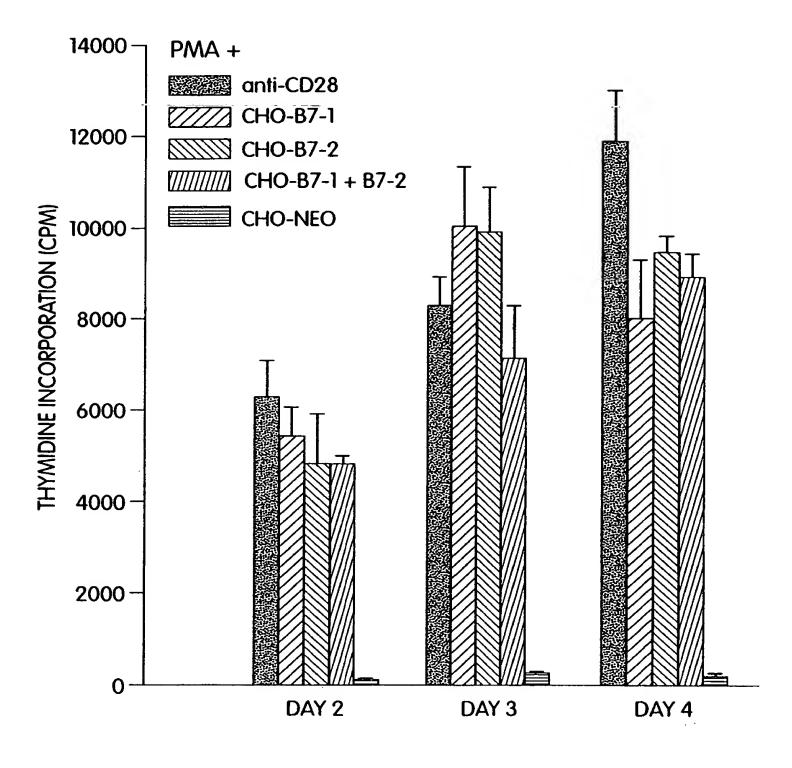
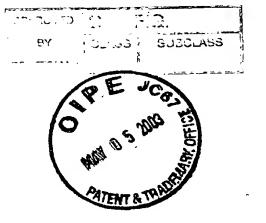


FIG. 20



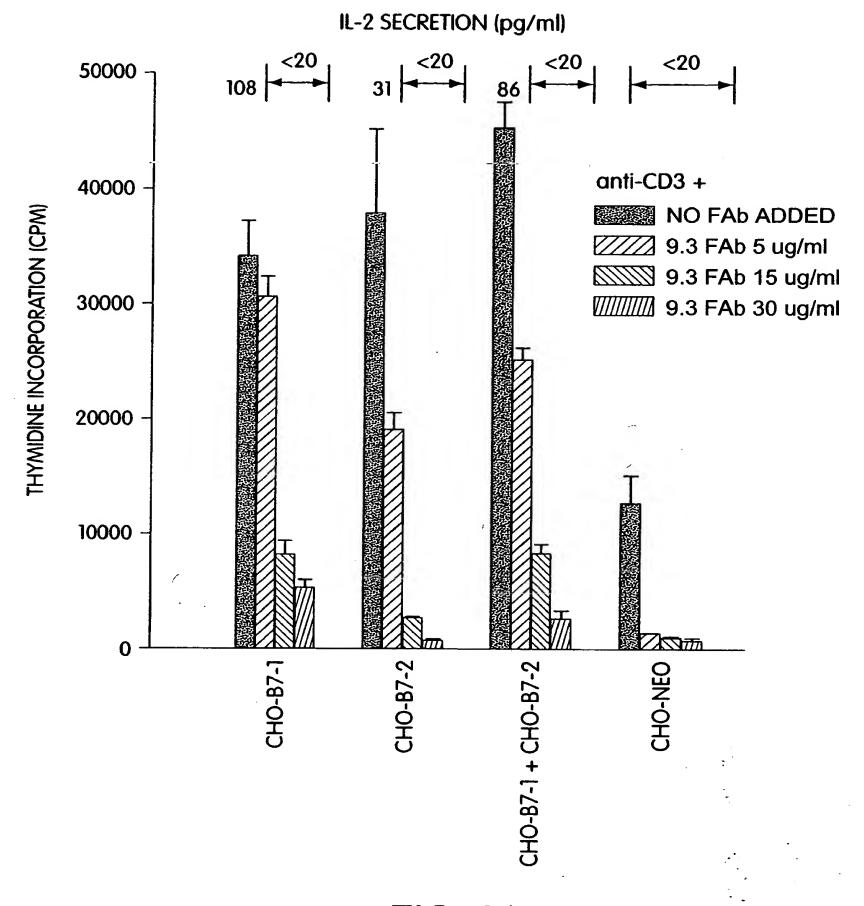
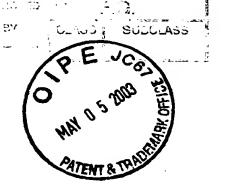


FIG. 21



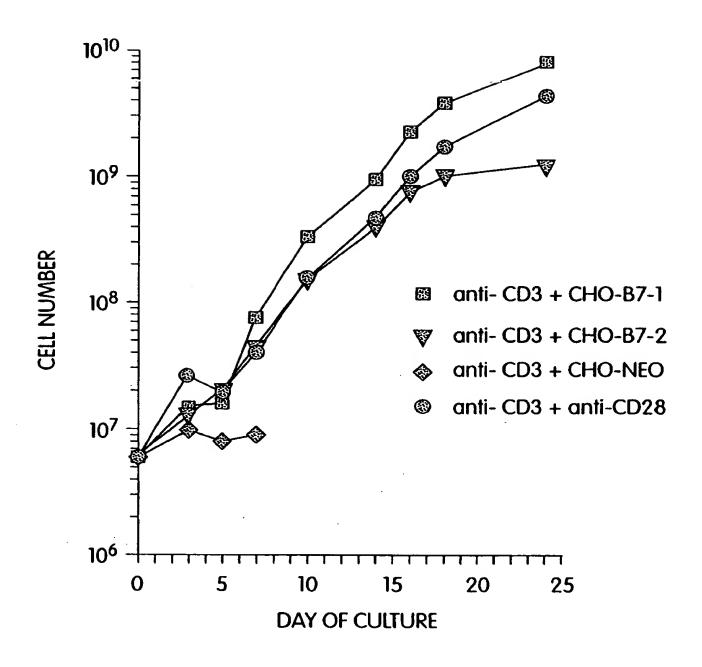
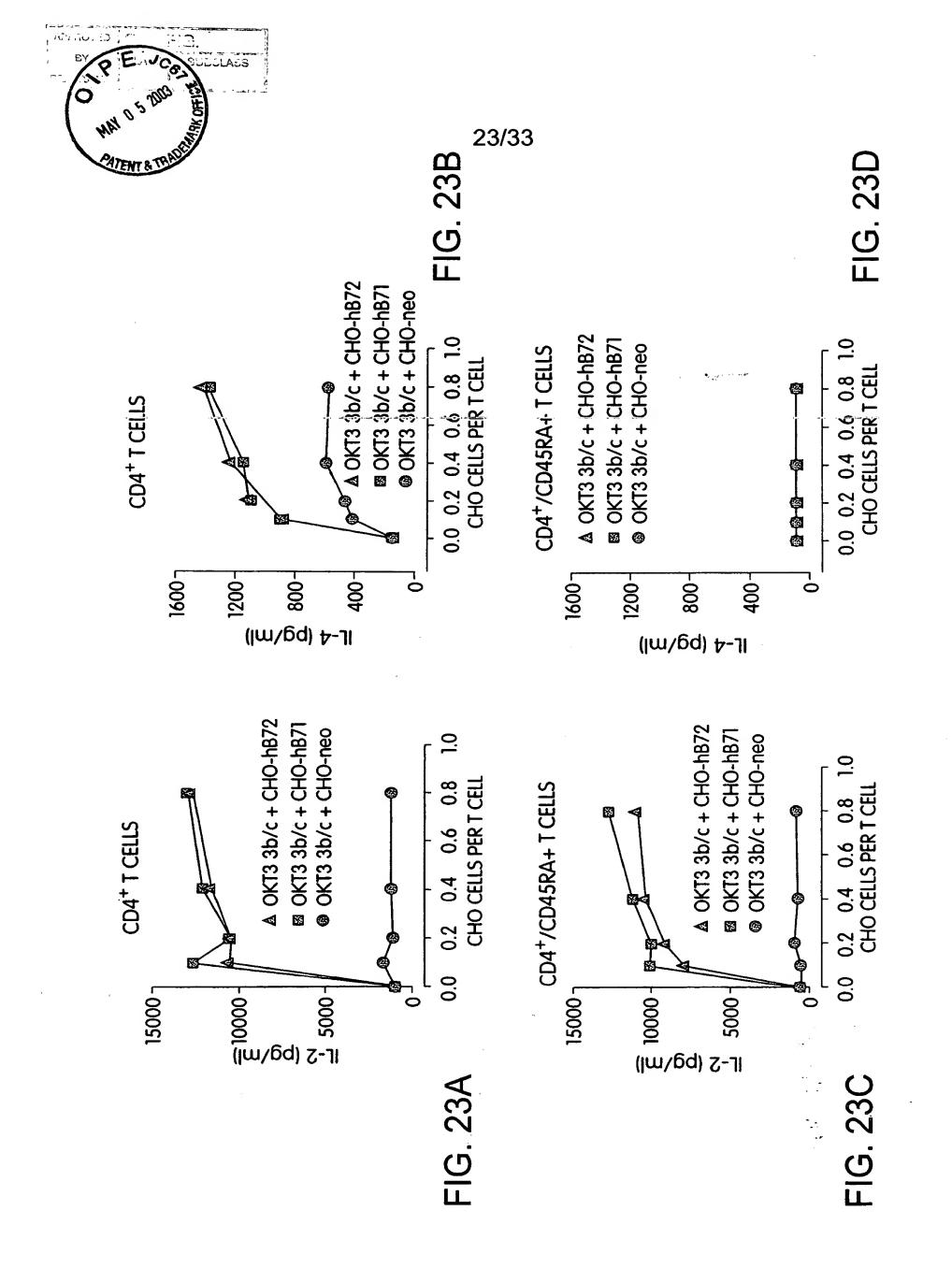
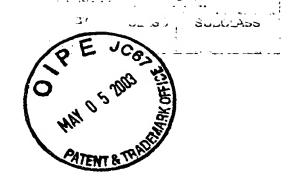
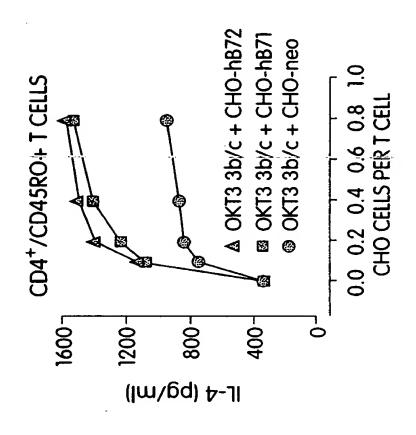


FIG. 22







▲ OKT3 3b/c + CHO-hB72

(lm\gq) 2-Jl

CD4*/CD45RO+ T CELLS

15000₁

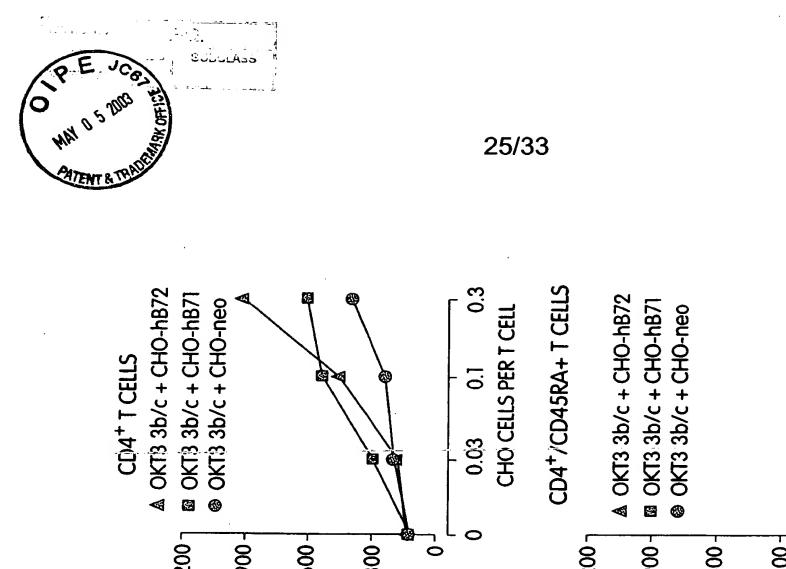
© OKT3 3b/c + CHO-hB71 © OKT3 3b/c + CHO-neo

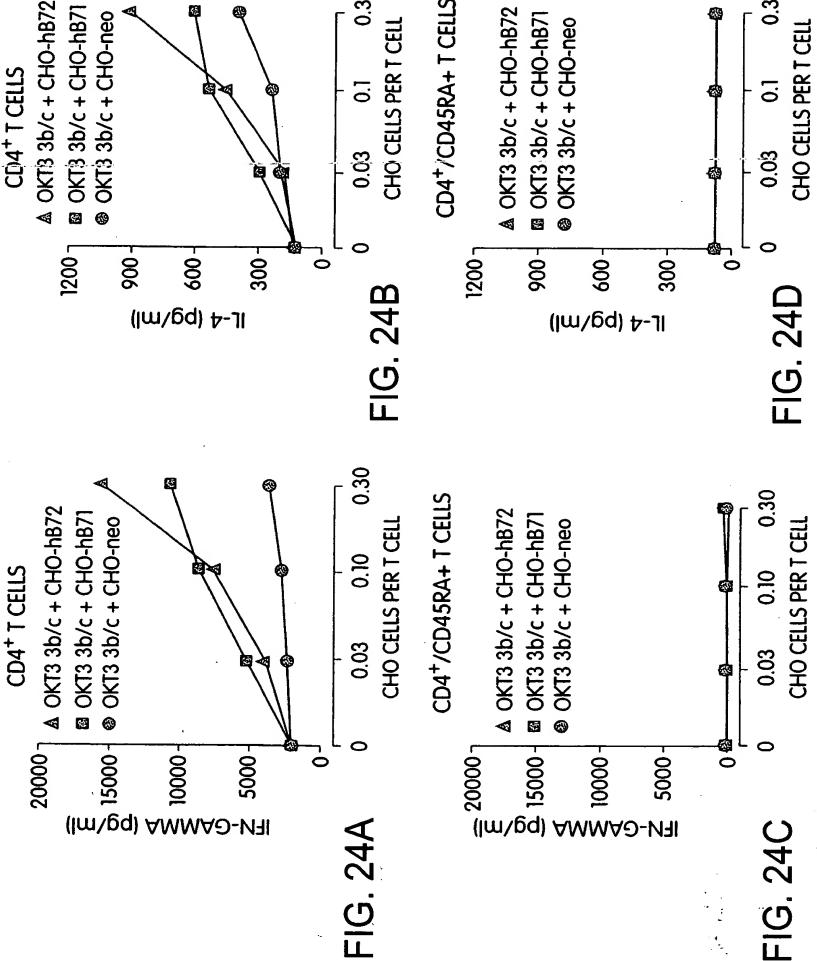
5000

FIG. 23E

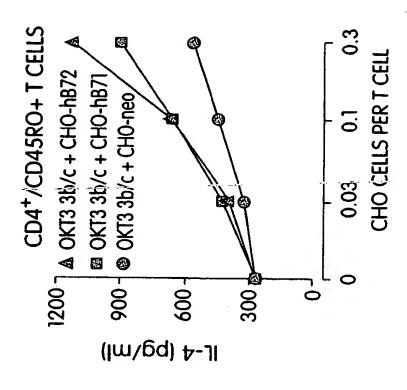
0.2 0.4 0.6 0.8 CHO CELLS PER T CELL

FIG. 23F









CD4*/CD45RO+ T CELLS

(a) 20000 A OKT3 3b/c + CHO-hB72 (b) 15000 C OKT3 3b/c + CHO-hB71 C OKT3 3b/c + CHO-hB71 C OKT3 3b/c + CHO-neo COKT3 3b/c + CHO-neo COK

FIG. 24E

CHO CELLS PER T CELL

0.10

0.03

ر 0

FIG. 24F



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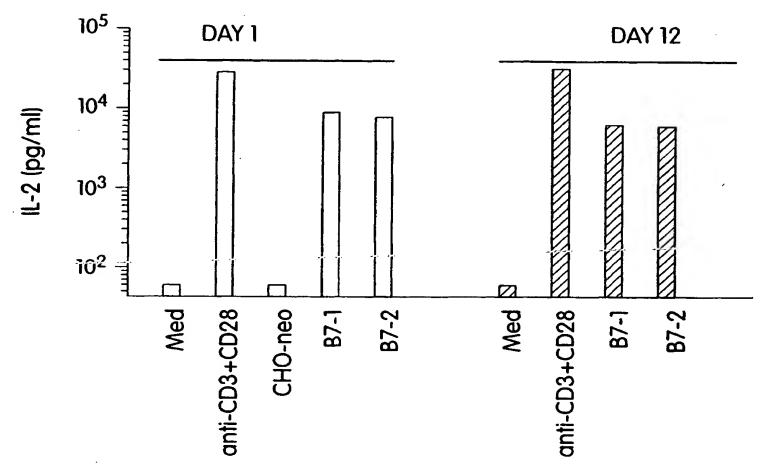


FIG. 25A

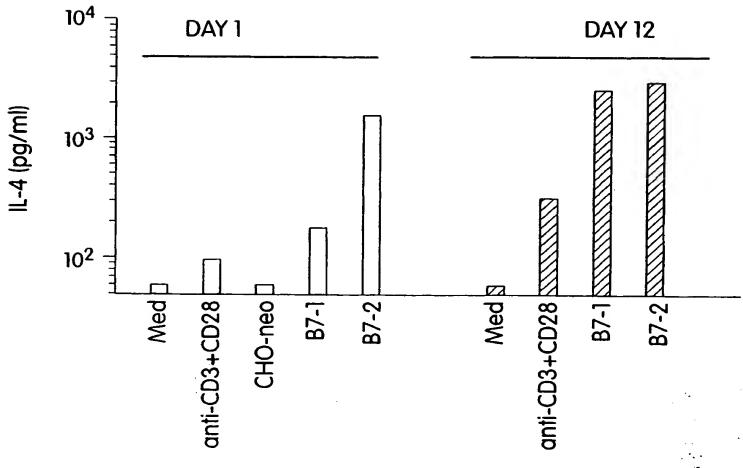


FIG. 25B



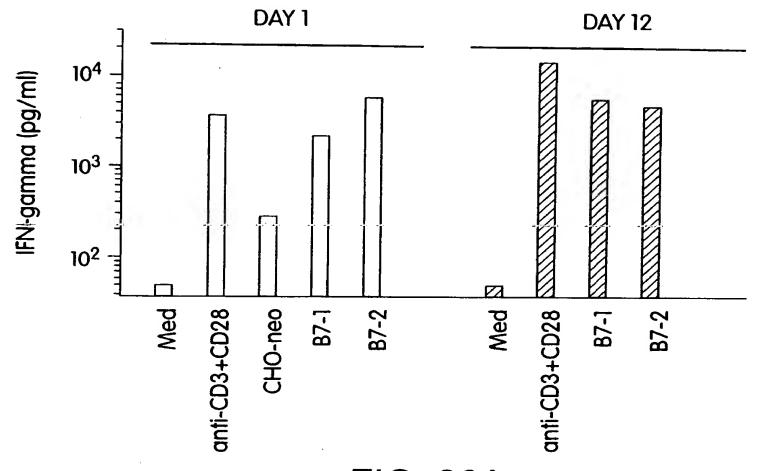


FIG. 26A

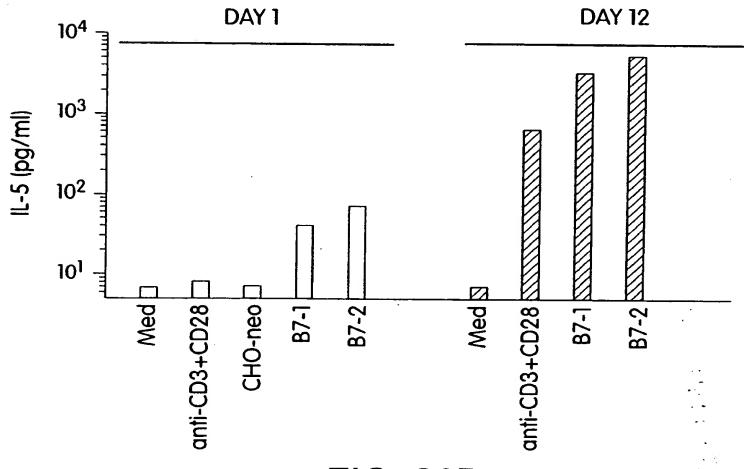


FIG. 26B



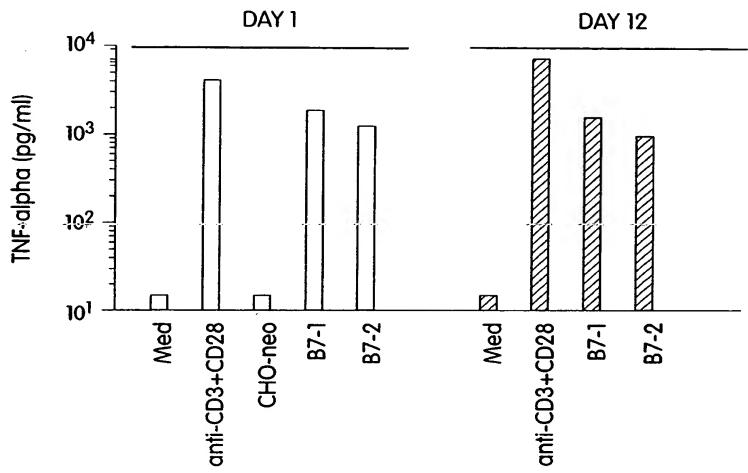
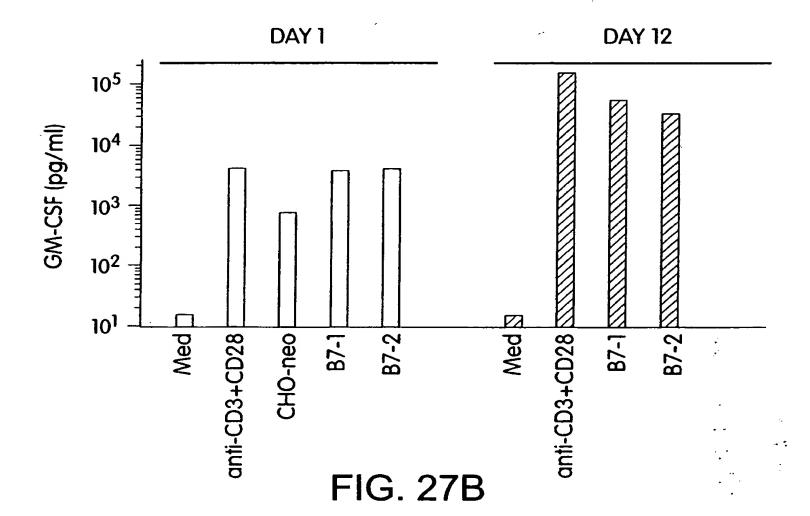
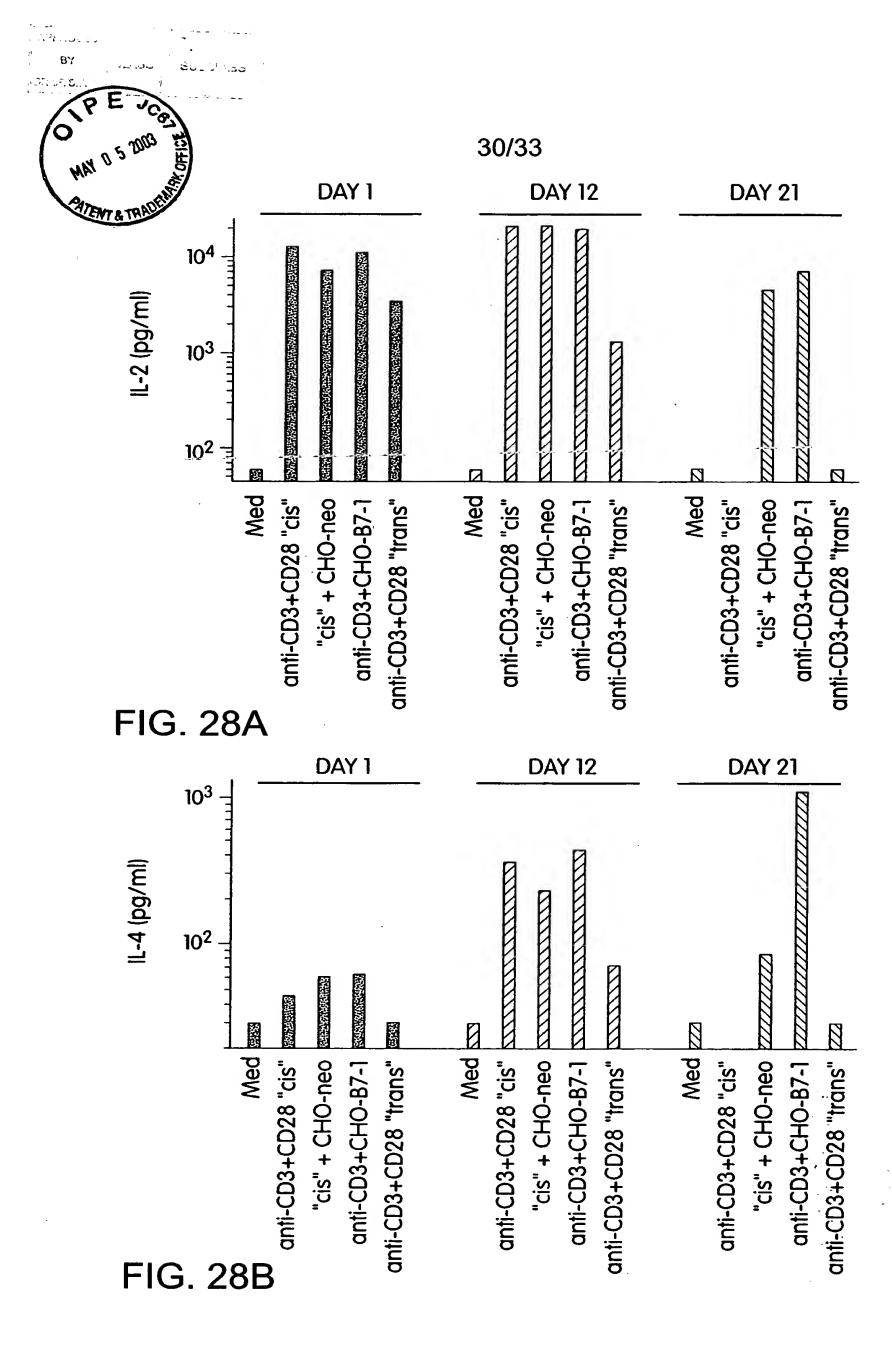
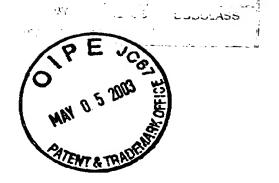


FIG. 27A







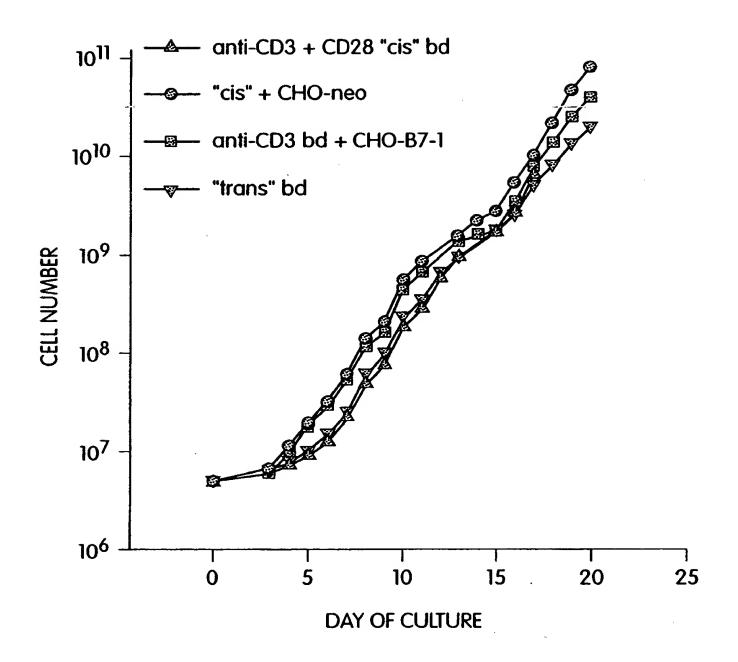


FIG. 29



